

DEPARTMENT of ENVIRONMENTAL SERVICES
Water Supply & Pollution Control Division - Biology Bureau

LAKE TROPHIC DATA

MORPHOMETRIC:

Lake: IVANHOE, LAKE	Lake Area (ha):	50.18
Town: WAKEFIELD	Maximum depth (m):	6.1
County: Carroll	Mean depth (m):	3.6
River Basin: Coastal	Volume (m ³):	1809000
Latitude: 43°36'05" N	Relative depth:	0.8
Longitude: 70°59'25" W	Shore configuration:	1.08
Elevation (ft): 596	Areal water load (m/yr):	1.75
Shore length (m): 2700	Flushing rate (yr ⁻¹):	0.50
Watershed area (ha): 160.6	P retention coeff.:	0.83
% watershed ponded: 0.0	Lake type:	natural w/dam

<u>BIOLOGICAL:</u>		27 January 1993	2 July 1992
DOM. PHYTOPLANKTON (% TOTAL)	#1	DINOBRYON 90%	DINOBRYON 98%
	#2		
	#3		
PHYTOPLANKTON ABUNDANCE (cells/mL)			115
CHLOROPHYLL-A (µg/L)			1.47
DOM. ZOOPLANKTON (% TOTAL)	#1	NAUPLIUS LARVA 63%	CALANOID COPEPODS 29%
	#2	CALANOID COPEPODS 31%	KERATELLA 25%
	#3		NAUPLIUS LARVA 22%
ROTIFERS/LITER		3	41
MICROCRUSTACEA/LITER		49	112
ZOOPLANKTON ABUNDANCE (#/L)		52	153
VASCULAR PLANT ABUNDANCE			Scattered
SECCHI DISK TRANSPARENCY (m)			6.0 Visible on bottom
BOTTOM DISSOLVED OXYGEN (mg/L)		12.9	9.3
BACTERIA (E. coli, #/100 ml)	#1		
	#2		
	#3		

SUMMER THERMAL STRATIFICATION:

not stratified

Depth of thermocline (m): None
Hypolimnion volume (m³) : None
Anoxic volume (m³) : None

CHEMICAL:

Lake: IVANHOE, LAKE
Town: WAKEFIELD

	27 January 1993		2 July 1992		
DEPTH (m)	1.5	3.5	2.0		5.0
pH (units)	6.3	6.3	6.7		6.7
A.N.C. (Alkalinity)	3.1	2.9	2.7		1.0
NITRATE NITROGEN	0.06	0.05	< 0.02		< 0.02
TOTAL KJELDAHL NITROGEN	0.17	0.26			
TOTAL PHOSPHORUS	0.005	0.005	0.006		0.008
CONDUCTIVITY (μ mhos/cm)	50.9	50.8	46.9		47.0
APPARENT COLOR (cpu)	33	33	< 5		< 5
MAGNESIUM			0.31		
CALCIUM			1.3		
SODIUM			6.0		
POTASSIUM			< 0.40		
CHLORIDE	11	11	10		10
SULFATE	3	3	3		3
TN : TP	46	62			
CALCITE SATURATION INDEX			4.1		

All results in mg/L unless indicated otherwise

TROPHIC CLASSIFICATION: 1992

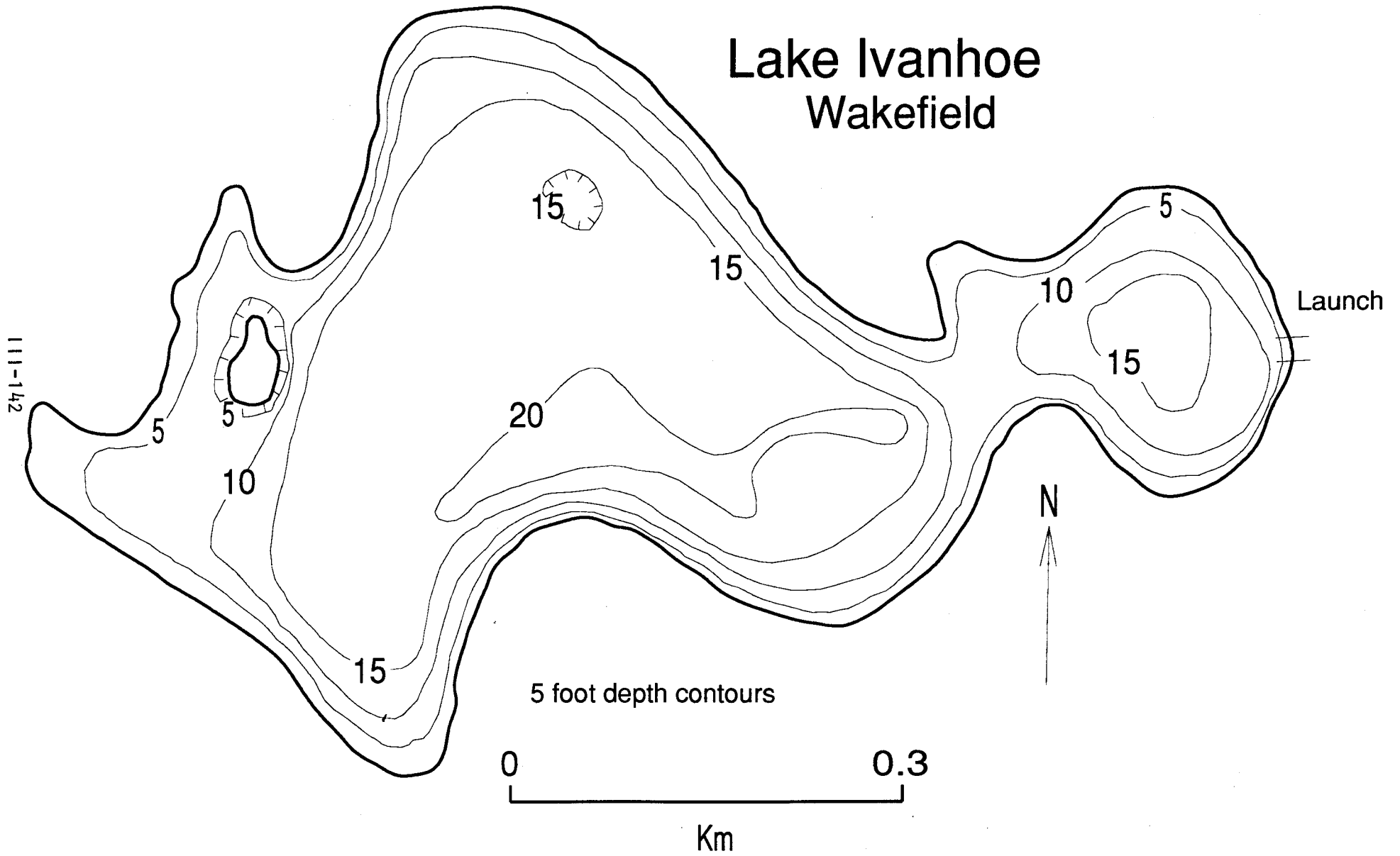
D.O. S.D. PLANT CHL TOTAL CLASS

**	0	1	0	1	Oligo.
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COMMENTS:

1. Previously known as Little Round Pond.
2. Good launch site off Acton Ridge Road.
3. Two beaches were observed as well as an island loon sanctuary.
4. This lake was previously surveyed and classified in 1981. There was no change in trophic points or classification between the two years.
5. Dinobryon (35%) was the dominant wholewater phytoplankton. The dominant classes were the golden-browns (Chrysophyceae) (35%), greens (25%) and blue-greens (20%).

Lake Ivanhoe Wakefield



FIELD DATA SHEET

LAKE: IVANHOE, LAKE	TOWN: WAKEFIELD
DATE: 07/02/92	WEATHER: CLEAR, WARM, BREEZY

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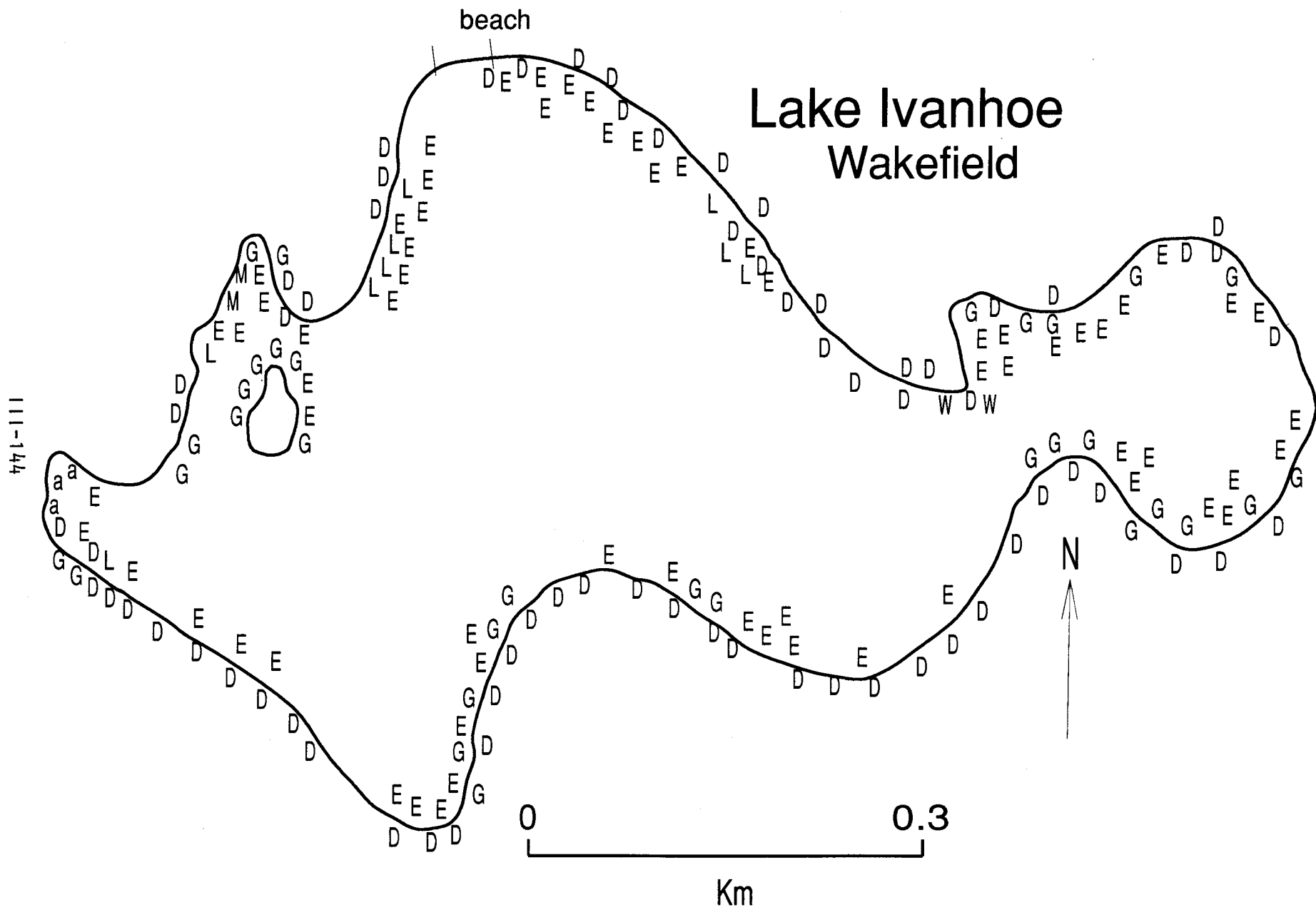
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SECCHI DISK (m):      6.0 VOB          COMMENTS:
BOTTOM DEPTH (m):     6.0
TIME:      1230

*Dissolved oxygen values are in mg/L
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